

## OUR STORIES

## LARGEST GEOTEXTILE-REINFORCED SEAL IN OUR HISTORY

The Wheatbelt Region can now lay claim to completion of our largest Geotextile-Reinforced Seal (GRS) campaign to date. The region has some of the oldest roads in Western Australia, damaged through age and weathering.

GRSs are created by spraying a layer of bitumen onto a pavement then covering the bitumen with a layer of geotextile, a permeable fabric, and lightly rolling.

The treatment can be used to provide more robust waterproofing. Applying GRS on the Wheatbelt road network has helped seal cracks and its use can significantly reduce maintenance costs and improves the life of the road.

In total, 1.53 million square metres of GRS was laid equating to approximately 170 kilometres of the road network.

GRS is an engineering tool to prevent cracks being exposed to wet weather. It creates a very tough, bitumen rich waterproof membrane that resists the tendency for cracks to open up and become exposed to the elements.

The product was used on priority roads identified as having cracked pavements, and where standard single and double-coat seals had previously failed to adequately waterproof.

For the region to apply GRS, the road surface was cleaned then a bond coat of bitumen applied that the geotextile sticks to. The geotextile is rolled out and any creases are removed. Additional bitumen is then applied on top of the geotextile, followed by a spread of 14 mm aggregate then rolled. A final light coat of bitumen is applied to the 14 mm followed by a spread of 7 mm of sealing aggregate. Rollers then go over the entire section to secure the seal. Once completed, the road is open to traffic at low speed, until the seal has settled under heat and traffic.

This treatment is an innovative and cost effective way to increase the life and improve the safety of some of our ageing roads without having to completely reconstruct them. A video showing the region laying the GRS onto the bond coat can be viewed on our website.